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Records for: PN=EP 448923

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1. 3/34/1 (Item 1 from file: 351)

008785416

WPI Acc No: 1991-289431/ 199140

Detection of biological activities in a specimen - by measuring a fluorescent signal of a substance to indicate the presence of microorganisms

Patent Assignee: AVL PHOTRONICS CORP (AVLP-N); AVL PHOTRONICS CORP (AVLV )

Inventor: FRAATZ R; JOEBSTL E; KARPF H

Number of Countries: 005 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 448923	A	19911002	EP 90890304	A	19901119	199140 B
EP 448923	B1	19960103	EP 90890304	A	19901119	199606
DE 69024631	E	19960215	DE 624631	A	19901119	199612
			EP 90890304	A	19901119	

Priority Applications (No Type Date): US 90501123 A 19900329

Cited Patents: EP 104463; EP 158497; EP 171158; EP 333253; EP 54001; 1.Jnl.Ref; WO 9013663

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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EP 448923	A			
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Designated States (Regional): AT DE FR GB IT

EP 448923	B1	E	26 C12Q-001/04	
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Designated States (Regional): AT DE FR GB IT

DE 69024631	E		C12Q-001/04	Based on patent EP 448923
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Abstract (Basic): EP 448923 A

A method for detecting biological activities in a specimen is claimed comprising: (a) introducing a sample of the specimen and a culture medium into a sealable transparent container and sealing it, (b) exposing the specimen to conditions enabling metabolic processes to take place in the presence of microorganisms in the sample, the concn. of initial substances being lowered and that of metabolic prods. being raised during metabolic processes, (c) generating a fluorescent signal with a fluorescent sensor in response to changes of concn. of at least one substance subject to conversion by the metabolic processes, (d) optically interrogating the fluorescent signal to produce a test signal indicating the change of concn., and (e) monitoring the signal over time for changes indicating the presence of microorganisms.

USE/ADVANTAGE - The method can be used for the sensitive detection of substances such as CO<sub>2</sub>, O<sub>2</sub>, H(+), NH<sub>4</sub>(+), H<sub>2</sub>S, H<sub>2</sub> and metal ions to indicate the presence of microorganisms in specimens such as blood, food samples, medical appts. or soil and water samples. (26pp Dwg.No.0/11)

Abstract (Equivalent): EP 448923 B

A method for detecting biological activities in a specimen, comprising: introducing a sample of the specimen and a culture medium into a sealable transparent container containing at least one activatable, inert fluorophore and at least one indicator component which changes its optical characteristics in response to changes in

concentration of at least one substance in said container; sealing said container; exposing the specimen to conditions enabling metabolic activities to take place in the presence of microorganisms in the sample, wherein the concentration of at least one substance is altered during metabolic activities; exciting said inert fluorophore to emit fluorescent emission radiation; modulating the fluorescent emission radiation of the inert fluorophore with the optical changes of the indicator to produce a modulated fluorescent signal; and monitoring the signal over time for changes indicating the presence of microorganisms.

Dwg.0/11

Derwent Class: A89; B04; D16; J04

International Patent Class (Main): C12Q-001/04

International Patent Class (Additional): C12M-001/34

Derwent WPI (Dialog® File 351): (c) 2002 Derwent Info Ltd. All rights reserved.

2.

3/34/2 (Item 2 from file: 345)

10136035

Basic Patent (No,Kind,Date): AT 8901147 A 900315

PATENT FAMILY:

AUSTRIA (AT)

Patent (No,Kind,Date): AT 8901147 A 900315

VERFAHREN UND VORRICHTUNG ZUR FESTSTELLUNG BIOLOGISCHER AKTIVITAETEN IN EINER PROBE (German)

Patent Assignee: AVL AG (CH)

Author (Inventor): SMOLE HERBERT ING

Priority (No,Kind,Date): AT 891147 A 890512

Applic (No,Kind,Date): AT 891147 A 890512

IPC: \* G01N-033/84; G01N-021/35; G01N-021/64; C12Q-001/00

CA Abstract No: ; 115(09)088798T

Derwent WPI Acc No: ; C 90-116257

Language of Document: German

Patent (No,Kind,Date): AT 391371 B 900925

VERFAHREN UND VORRICHTUNG ZUR FESTSTELLUNG BIOLOGISCHER AKTIVITAETEN IN EINER PROBE (German)

Patent Assignee: AVL AG (CH)

Author (Inventor): SMOLE HERBERT ING

Priority (No,Kind,Date): AT 891147 A 890512

Applic (No,Kind,Date): AT 891147 A 890512

IPC: \* G01N-033/84; G01N-021/35; G01N-021/64; C12Q-001/00

Derwent WPI Acc No: \* C 90-116257

Language of Document: German

Patent (No,Kind,Date): AT 106946 E 940615

VERFAHREN ZUR FESTSTELLUNG BIOLOGISCHER AKTIVITAETEN IN EINER PROBE UND VORRICHTUNG ZUR DURCHFUEHRUNG DES VERFAHRENS. (German)

Patent Assignee: AVL MEDICAL INSTR AG (CH)

Author (Inventor): KARPF HELLFRIED; SMOLE HERBERT

Priority (No,Kind,Date): EP 89913044 A 891124; AT 891147 A 890512; WO 89AT110 A 891124

Applic (No,Kind,Date): EP 89913044 A 891124

Addnl Info: 00425587 940608

IPC: \* C12Q-001/04; C12M-001/34

CA Abstract No: \* 115(09)088798T

Derwent WPI Acc No: \* C 90-116257

Language of Document: German

Patent (No,Kind,Date): AT 132537 E 960115

VERFAHREN UND APPARAT ZUM NACHWEIS BIOLOGISCHER AKTIVITAETEN IN EINER PROBE (German)

Patent Assignee: AVL PHOTRONICS CORP (US)

Author (Inventor): FRAATZ ROBERT DR (US); JOEBSTL EWALD (US); KARPF HELLFRIED DR (AT)  
Priority (No,Kind,Date): US 501123 A 900329  
Applc (No,Kind,Date): EP 90890304 A 901119  
Addnl Info: 00448923 960103  
IPC: \* C12Q-001/04; C12M-001/34  
Derwent WPI Acc No: \* C 91-289431  
Language of Document: German

## GERMANY (DE)

Patent (No,Kind,Date): DE 58907854 C0 940714  
VERFAHREN ZUR FESTSTELLUNG BIOLOGISCHER AKTIVITAETEN IN EINER PROBE UND VORRICHTUNG ZUR DURCHFUEHRUNG DES VERFAHRENS. (German)  
Patent Assignee: AVL MEDICAL INSTR AG SCHAFFHAU (CH)  
Author (Inventor): KARPF HELLFRIED (AT); SMOLE HERBERT (CH)  
Priority (No,Kind,Date): AT 891147 A 890512; WO 89AT110 W 891124  
Applc (No,Kind,Date): DE 58907854 A 891124  
IPC: \* C12Q-001/04; C12M-001/34  
CA Abstract No: \* 115(09)088798T  
Derwent WPI Acc No: \* C 90-116257  
Language of Document: German  
Patent (No,Kind,Date): DE 69024631 C0 960215  
VERFAHREN UND APPARAT ZUM NACHWEIS BIOLOGISCHER AKTIVITAETEN IN EINER PROBE (German)  
Patent Assignee: AVL PHOTRONICS CORP (US)  
Author (Inventor): FRAATZ ROBERT DR (US); JOEBSTL EWALD (US); KARPF HELLFRIED DR (AT)  
Priority (No,Kind,Date): US 501123 A 900329  
Applc (No,Kind,Date): DE 69024631 A 901119  
IPC: \* C12Q-001/04; C12M-001/34  
Derwent WPI Acc No: \* C 91-289431  
Language of Document: German  
Patent (No,Kind,Date): DE 69024631 T2 960919  
VERFAHREN UND APPARAT ZUM NACHWEIS BIOLOGISCHER AKTIVITAETEN IN EINER PROBE (German)  
Patent Assignee: AVL PHOTRONICS CORP (US)  
Author (Inventor): FRAATZ ROBERT DR (US); JOEBSTL EWALD (US); KARPF HELLFRIED DR (AT)  
Priority (No,Kind,Date): US 501123 A 900329  
Applc (No,Kind,Date): DE 69024631 A 901119  
IPC: \* C12Q-001/04; C12M-001/34  
Derwent WPI Acc No: \* C 91-289431  
Language of Document: German

## EUROPEAN PATENT OFFICE (EP)

Patent (No,Kind,Date): EP 425587 A1 910508  
PROCESS FOR DETERMINING BIOLOGICAL ACTIVITIES IN A SAMPLE AND A DEVICE FOR IMPLEMENTING IT (English; French; German)  
Patent Assignee: AVL MEDICAL INSTR AG (CH)  
Author (Inventor): KARPF HELLFRIED (AT); SMOLE HERBERT (CH)  
Priority (No,Kind,Date): WO 89AT110 W 891124; AT 891147 A 890512  
Applc (No,Kind,Date): EP 89913044 A 891124  
Designated States: (National) AT; DE; FR; GB  
IPC: \* C12Q-001/04; C12M-001/34  
Derwent WPI Acc No: \* C 90-116257  
Language of Document: German  
Patent (No,Kind,Date): EP 448923 A1 911002  
METHOD AND APPARATUS FOR DETECTING BIOLOGICAL ACTIVITIES IN A SPECIMEN (English; French; German)  
Patent Assignee: AVL PHOTRONICS CORP (US)  
Author (Inventor): FRAATZ ROBERT DR (US); JOEBSTL EWALD (US); KARPF HELLFRIED DR (AT)  
Priority (No,Kind,Date): US 501123 A 900329  
Applc (No,Kind,Date): EP 90890304 A 901119  
Designated States: (National) AT; DE; FR; GB; IT

IPC: \* C12Q-001/04; C12M-001/34  
Derwent WPI Acc No: ; C 91-289431  
Language of Document: English  
Patent (No,Kind,Date): EP 425587 B1 940608  
PROCESS FOR DETERMINING BIOLOGICAL ACTIVITIES IN A SAMPLE AND A DEVICE  
FOR IMPLEMENTING IT. (English; French; German)  
Patent Assignee: AVL MEDICAL INSTR AG (CH)  
Author (Inventor): KARPF HELLFRIED (AT); SMOLE HERBERT (CH)  
Priority (No,Kind,Date): AT 891147 A 890512; WO 89AT110 W 891124  
Applic (No,Kind,Date): EP 89913044 A 891124  
Designated States: (National) AT; DE; FR; GB  
IPC: \* C12Q-001/04; C12M-001/34  
CA Abstract No: \* 115(09)088798T  
Derwent WPI Acc No: \* C 90-116257  
Language of Document: English; French; German  
Patent (No,Kind,Date): EP 448923 B1 960103  
METHOD AND APPARATUS FOR DETECTING BIOLOGICAL ACTIVITIES IN A SPECIMEN  
(English; French; German)  
Patent Assignee: AVL PHOTRONICS CORP (US)  
Author (Inventor): FRAATZ ROBERT DR (US); JOEBSTL EWALD (US); KARPF  
HELLFRIED DR (AT)  
Priority (No,Kind,Date): US 501123 A 900329  
Applic (No,Kind,Date): EP 90890304 A 901119  
Designated States: (National) AT; DE; FR; GB; IT  
IPC: \* C12Q-001/04; C12M-001/34  
Derwent WPI Acc No: \* C 91-289431  
Language of Document: English

## JAPAN (JP)

Patent (No,Kind,Date): JP 8205851 A2 960813  
APPARATUS FOR DETECTING BIOLOGICAL ACTIVITY (English)  
Patent Assignee: BECTON DICKINSON CO  
Author (Inventor): KARUFU HERUFURIITO; SUMOORE HERUBERUTO  
Priority (No,Kind,Date): AT 891147 A 890512  
Applic (No,Kind,Date): JP 95132474 A 950531  
IPC: \* C12M-001/34  
CA Abstract No: \* 115(09)088798T  
Derwent WPI Acc No: \* C 90-116257  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 2628406 B2 970709  
Priority (No,Kind,Date): AT 891147 A 890512  
Applic (No,Kind,Date): JP 89500092 A 891124  
IPC: \* C12Q-001/04; C12R-001-38; C12R-001-445; C12R-001-45;  
C12R-001-46; C12R-001-725; C12R-001-145  
CA Abstract No: \* 115(09)088798T  
Derwent WPI Acc No: \* C 90-116257  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 2694518 B2 971224  
Priority (No,Kind,Date): AT 891147 A 890512  
Applic (No,Kind,Date): JP 95132474 A 950531  
IPC: \* C12M-001/34  
CA Abstract No: \* 115(09)088798T  
Derwent WPI Acc No: \* C 90-116257  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 4500307 T2 920123  
Priority (No,Kind,Date): WO 89AT110 W 891124; AT 891147 A 890512  
Applic (No,Kind,Date): JP 90500092 A 891124  
IPC: \* C12Q-001/04; C12M-001/34; C12Q-001/10; C12Q-001/14; C12R-001-38  
; C12R-001-445; C12R-001-45; C12R-001-46; C12R-001-725; C12R-001-145  
CA Abstract No: \* 115(09)088798T  
Derwent WPI Acc No: \* C 90-116257  
Language of Document: Japanese

## UNITED STATES OF AMERICA (US)

Patent (No,Kind,Date): US 5217875 A 930608

METHOD FOR DETECTING BIOLOGICAL ACTIVITIES IN A SPECIMEN AND A DEVICE  
FOR IMPLEMENTING THE METHOD (English)  
Patent Assignee: AVL AG (CH)  
Author (Inventor): KARPF HELLFRIED (AT); SMOLE HERBERT (CH)  
Priority (No,Kind,Date): WO 89AT110 W 891124; AT 891147 A 890512  
Applc (No,Kind,Date): US 474786 A 900329  
National Class: \* 435034000; 435291000; 435817000; 382006000  
IPC: \* C12Q-001/02; C12M-001/34; G06K-009/00  
CA Abstract No: \* 115(09)088798T  
Derwent WPI Acc No: \* C 90-116257  
Language of Document: English  
Patent (No,Kind,Date): US 5266486 A 931130  
METHOD AND APPARATUS FOR DETECTING BIOLOGICAL ACTIVITIES IN A SPECIMEN  
(English)  
Patent Assignee: NVL PHOTRONICS CORP (US)  
Author (Inventor): FRAATZ ROBERT (US); JOEBSTL EWALD (US); KARPF  
HELLFRIED (AT)  
Priority (No,Kind,Date): US 474786 A2 900329; AT 891147 A 890512  
Applc (No,Kind,Date): US 501123 A 900329  
Addnl Info: 5217875 Patented  
National Class: \* 435287000; 435291000; 435289000; 435165000;  
435805000; 435035000  
IPC: \* C12M-001/00  
CA Abstract No: \* 115(09)088798T  
Derwent WPI Acc No: \* C 90-116257; C 91-289431  
Language of Document: English  
Patent (No,Kind,Date): US 5372936 A 941213  
METHOD FOR DETECTING BIOLOGICAL ACTIVITIES IN A SPECIMEN (English)  
Patent Assignee: AVL PHOTRONICS CORP (US)  
Author (Inventor): FRAATZ ROBERT (US); JOEBSTL EWALD (US); KARPF  
HELLFRIED (AT)  
Priority (No,Kind,Date): US 108540 A 930819; AT 891147 A 890512;  
US 501123 A3 900329; US 474786 A2 900329  
Applc (No,Kind,Date): US 108540 A 930819  
Addnl Info: 5266486 Patented; 5217875 Patented  
National Class: \* 435034000; 435004000; 435029000; 435291000;  
435294000; 435817000; 435968000; 436172000; 436800000; 436805000;  
382006000  
IPC: \* C12Q-001/04; C12M-001/34; G01N-021/76  
CA Abstract No: \* 115(09)088798T  
Derwent WPI Acc No: \* C 90-116257; C 91-289431  
Language of Document: English

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)

Patent (No,Kind,Date): WO 9013663 A1 901115  
PROCESS FOR DETERMINING BIOLOGICAL ACTIVITIES IN A SAMPLE AND A DEVICE  
FOR IMPLEMENTING IT (English)  
Patent Assignee: AVL AG (CH)  
Author (Inventor): KARPF HELLFRIED (AT); SMOLE HERBERT (CH)  
Priority (No,Kind,Date): AT 891147 A 890512  
Applc (No,Kind,Date): WO 89AT110 A 891124  
Designated States: (National) JP; US (Regional) AT; DE; FR; GB  
Filing Details: WO 100000 With international search report  
IPC: \* C12Q-001/04; C12M-001/34  
Derwent WPI Acc No: \* C 90-116257  
Language of Document: German

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Records for: PN=WO 9212413

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1. 5/34/1 (Item 1 from file: 351)

009141350 \*\*Image available\*\*

WPI Acc No: 1992-268788/ 199232

Multilayer blood culture sensor - comprises pH sensitive absorbence based dye and pH insensitive fluorescence dye in spectrally coupled matrices

Patent Assignee: BAXTER DIAGNOSTICS INC (BAXT ); DADE MICROSCAN INC (DADE-N); BAXTER INT INC (BAXT ); ARJO WIGGINS SA (ARJO ); DADE INT INC (DADE-N)

Inventor: BASCOMB S; BOBOLIS J; MORRIS R J; OLSEN C S; SHERMAN D; BASCOMB S D; OLSON C S; SAND T; SWENSON F J

Number of Countries: 020 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9212413	A1	19920723	WO 91US9716	A	19911223	199232 B
AU 9212638	A	19920817	WO 91US9716	A	19911223	199245
			AU 9212638	A	19911223	
EP 519066	A1	19921223	WO 91US9716	A	19911223	199252
			EP 92904836	A	19911223	
NO 9203436	A	19920903	WO 91US9716	A	19911223	199301
			NO 923436	A	19920903	
JP 5504263	W	19930708	WO 91US9716	A	19911223	199332
			JP 92505272	A	19911223	
AU 652423	B	19940825	AU 9212638	A	19911223	199436
US 5372784	A	19941213	US 88238710	A	19880831	199504
			US 90609278	A	19901105	
			US 91638481	A	19910104	
			US 94212674	A	19940311	
EP 519066	A4	19930818	EP 92904836	A	19920000	199527
US 5565328	A	19961015	US 88238710	A	19880831	199647
			US 92895149	A	19920605	
			US 9316654	A	19930209	
			US 93174613	A	19931228	
			US 95431194	A	19950427	
			US 95579089	A	19951227	

Priority Applications (No Type Date): US 91638481 A 19910104; US 88238710 A 19880831; US 90609278 A 19901105; US 94212674 A 19940311

Cited Patents: US 4231754; US 4803049; US 4851195; US 4867919; US 4945060; EP 214768; EP 283116; EP 352610; US 4822746

Patent Details:

Patent No	Kind	Lat	Pg	Main IPC	Filing Notes
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WO 9212413	A1	E	24	G01N-021/64	
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Designated States (National): AU CA JP KR NO

Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LU MC NL SE

AU 9212638	A	G01N-021/64	Based on patent WO 9212413
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EP 519066	A1	E	24	Based on patent WO 9212413
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Designated States (Regional): BE DE ES FR GB IT SE

JP 5504263	W	8	C12Q-001/06	Based on patent WO 9212413
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AU 652423	B		G01N-021/80	Previous Publ. patent AU 9212638
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US 5372784	A	12 G01N-021/76	Based on patent WO 9212413 CIP of application US 88238710 CIP of application US 90609278 Cont of application US 91638481 CIP of patent US 5173434
US 5565328	A	6 C12Q-001/26	Cont of application US 88238710 Cont of application US 92895149 Cont of application US 9316654 Cont of application US 93174613 Cont of application US 95431194
NO 9203436	A	G01N-000/00	
EP 519066	A4	G01N-021/64	

Abstract (Basic): WO 9212413 A

Multilayer blood culture sensor comprises (a) a pH sensitive absorbence based dye (I) encapsulated in (or isolated by) a first light transmissive, gas permeable, proton impermeable matrix and (b) a pH insensitive fluorescence dye in an inert light-transparent matrix, the first and second matrices being spectrally coupled. (I) may be e.g. xylanol blue or bromothymol blue. (II) may be e.g. Rhodamine B or Rhodamine 101. Matrices may be silicone or acrylic matrices.

USE/ADVANTAGE - Change in fluorescence of the fluorophone can be related to the intensity of colour in a reaction and consequently related to the quantity of a substance of interest. Sensor is used partic. to detect or determine the concn. of microorganisms in a body fluid.

In an example, Wacker (RTM) silicone elastomer 3601 part A was mixed with Wacker (RTM) 3601 catalyst part B in a 9:1 ratio. 5% w/w of a 50mM xylanol blue soln. dissolved in 5 mM borate buffer pH 1.1 contg. 1% Tween (RTM) 80 was added to the silicone and homogenised. Mixt. was then poured into an Al square mould to a thickness of 30/1000 of an inch and cured at 55 deg.C for 2 hrs. Wacker (RTM) silicone was prep'd. as previously and 2% w/w of 7.5 mM Rhodamine 101 in 50 mM Tris-HCl buffer pH 8.5 in 95% ethylene glycol was added to the silicone. Mixt. was poured over the previously cured xylanol blue layer and cured at 55 deg.C overnight. This cured, dehydrated double layer sensor consisted of 2 distinct layers each 30/1000 of an inch thick. Disks were then punched out of the mould and adhered onto the base of bottles using more silicone, with the absorbence layer face down. The bottles were cured at 55 deg.C for 15 mins., rehydrated with normal saline and autoclaved. Saline was replaced with growth media and the bottles inoculated with E. coli. As the concn. of CO<sub>2</sub> increased in the blood culture bottle, the absorbence of the xylanol blue decreased, allowing more light to reach the Rhodamine 101 to thus increase the amt. of fluorescence emitted at 590 nm. This increase in fluorescence intensity was correlated with the culture growth. .D

Abstract (Equivalent): US 5565328 A

Detecting indole produced by a bacterial isolate based on the quenching of the fluorescence of 8-methoxypyrene tri-sulphonic acid or esculin, comprises inoculating a bacterial isolate into a chamber containing peptone and tryptophan; incubating 2 to 5 hours; adding at an acidic pH, dimethyl aminocinnamaldehyde containing 8-methoxypyrene tri-sulphonic acid or esculin, wherein the acidic pH is sufficiently low so that any indole would form a green-blue coloured product when reacted with dimethyl aminocinnamaldehyde; detecting with a fluorometric reader the extent of indole formation based on the quenching of fluorescence of the 8-methoxypyrene tri-sulphonic acid or esculin as a result of any green-blue product formed by the reaction of the indole and the dimethyl aminocinnamaldehyde.

Dwg.0/0

US 5372784 A

Multilayer sensor for determining the concn. or presence of a microorganism in a body fluid comprises a pH sensitive absorbence based dye encapsulated in a first light transmissive, gas permeable, proton-impermeable matrix, and a pH insensitive fluorescence dye encapsulated in an inert light transparent second matrix. The first and

second matrices are spectrally coupled and in close proximity.

Pref. pH sensitive absorbence based dye is xylanol blue or bromothymol blue, and the fluorescence dye is rhodamine 101 or rhodamine B. The two matrices comprise silicone or acrylic.

USE - Determining the concn. or presence of microorganisms in body fluids e.g. to monitor microbial infections grown in a fluid culture bottle.

Dwg.1/5

Derwent Class: A96; B04; D16; S03

International Patent Class (Main): C12Q-001/06; C12Q-001/26; G01N-000/00;

G01N-021/64; G01N-021/76; G01N-021/80

International Patent Class (Additional): C12Q-001/08; G01N-021/78;

G01N-033/52; H01L-021/306

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2.

5/34/2 (Item 2 from file: 345)

10624154

Basic Patent (No,Kind,Date): CA 2070806 AA 19920506

PATENT FAMILY:

AUSTRALIA (AU)

Patent (No,Kind,Date): AU 9189371 A1 19920526

MEASUREMENT OF COLOR REACTIONS BY MONITORING A CHANGE OF FLUORESCENCE  
(English)

Patent Assignee: BAXTER DIAGNOSTICS INC

Author (Inventor): MORRIS ROGER JAMES; BASCOMB SHOSHANA; OLSON CAROLYN  
SHELCHUK

Priority (No,Kind,Date): WO 91US8118 A 19911030; US 609278 A  
19901105

Applic (No,Kind,Date): AU 9189371 A 19911030

IPC: \* G01N-021/78

Language of Document: English

Patent (No,Kind,Date): AU 9212638 A1 19920817

MEASUREMENT OF BACTERIAL CO<sub>2</sub> PRODUCTION IN AN ISOLATED FLUOROPHORE BY  
MONITORING AN ABSORBANCE REGULATED CHANGE OF FLUORESCENCE (English)

Patent Assignee: BAXTER DIAGNOSTICS INC

Author (Inventor): MORRIS ROGER JAMES; BASCOMB SHOSHANA; BOBOLIS JAMIE  
; SHERMAN DAVID; OLSEN CAROLYN SHELCHUK

Priority (No,Kind,Date): WO 91US9716 A 19911223; US 638481 A  
19910104

Applic (No,Kind,Date): AU 9212638 A 19911223

IPC: \* G01N-021/64; G01N-021/76; C12Q-001/06

Derwent WPI Acc No: \* C 92-268788

Language of Document: English

Patent (No,Kind,Date): AU 652423 B2 19940825

MEASUREMENT OF BACTERIAL CO<sub>2</sub> PRODUCTION IN AN ISOLATED FLUOROPHORE BY  
MONITORING AN ABSORBANCE REGULATED CHANGE OF FLUORESCENCE (English)

Patent Assignee: BAXTER DIAGNOSTICS INC

Author (Inventor): MORRIS ROGER JAMES; BASCOMB SHOSHANA; BOBOLIS JAMIE  
; SHERMAN DAVID; OLSEN CAROLYN SHELCHUK

Priority (No,Kind,Date): WO 91US9716 W 19911223; US 638481 A  
19910104

Applic (No,Kind,Date): AU 9212638 A 19911223

IPC: \* G01N-021/80; G01N-033/52; C12Q-001/08

CA Abstract No: \* 117(17)167173E

Derwent WPI Acc No: \* C 92-268788

Language of Document: English

Patent (No,Kind,Date): AU 652592 B2 19940901

MEASUREMENT OF COLOR REACTIONS BY MONITORING A CHANGE OF FLUORESCENCE

(English)

Patent Assignee: BAXTER DIAGNOSTICS INC  
Author (Inventor): MORRIS ROGER JAMES; BASCOMB SHOSHANA; OLSON CAROLYN SHELCHEK  
Priority (No,Kind,Date): WO 91US8118 W 19911030; US 609278 A 19901105  
Applc (No,Kind,Date): AU 9189371 A 19911030  
IPC: \* G01N-021/78; G01N-021/64  
CA Abstract No: \* 117(14)142622N  
Derwent WPI Acc No: \* C 92-183806  
Language of Document: English

BRAZIL (BR)

Patent (No,Kind,Date): BR 9106202 A 19930323  
PROCESSO PARA DETECTAR A PRESENCA E PROCESSO PARA DETERMINAR A CONCENTRACAO DE UMA SUBSTANCIA EM SOLUCAO, CAMARA DE REACAO, E CONJUNTO PARA CONDUZIR OS PROCESSOS (Portugese)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER JAMES; BASCOMB SHOSHANA; OLSON CAROLYN SHELCHEK  
Priority (No,Kind,Date): US 609278 A 19901105; WO 91US8118 A 19911030  
Applc (No,Kind,Date): BR 91U6202 A 19911030  
IPC: \* G01N-021/78  
CA Abstract No: \* 117(14)142622N  
Derwent WPI Acc No: \* C 92-183806  
Language of Document: Portugese

CANADA (CA)

Patent (No,Kind,Date): CA 2070806 AA 19920506  
MEASUREMENT OF COLOR REACTIONS BY MONITORING A CHANGE OF FLUORESCENCE (English; French)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER J (US); BASCOMB SHOSHANA (US); OLSON CAROLYN S (US)  
Priority (No,Kind,Date): US 609278 A 19901105  
Applc (No,Kind,Date): CA 2070806 A 19911030  
CA Abstract No: \* 117(14)142622N  
Derwent WPI Acc No: \* C 92-183806  
Language of Document: English  
Patent (No,Kind,Date): CA 2077560 AA 19920705  
MEASUREMENT OF BACTERIAL CO<sub>2</sub> PRODUCTION IN AN ISOLATED FLUOROPHORE BY MONITORING AN ABSORBANCE REGULATED CHANGE OF FLUORESCENCE (English; French)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER J (US); BASCOMB SHOSHANA (US); BOBOLIS JAMIE (US); SHERMAN DAVID (US); OLSON CAROLYN (US)  
Priority (No,Kind,Date): US 638481 A 19910104  
Applc (No,Kind,Date): CA 2077560 A 19911223  
IPC: \* C12Q-001/06; G01N-033/52; G01N-033/49  
CA Abstract No: \* 117(17)167173E  
Derwent WPI Acc No: \* C 92-268788  
Language of Document: English

GERMANY (DE)

Patent (No,Kind,Date): DE 69110658 CO 19950727  
MESSUNG VON FARBREAKTIONEN DURCH UEBERWACHUNG EINER FLUORESZENZAENDERUNG. (German)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER (US); BASCOMB SHOSHANA (US); OLSON CAROLYN (US)  
Priority (No,Kind,Date): US 609278 A 19901105; WO 91US8118 W 19911030  
Applc (No,Kind,Date): DE 69110658 A 19911030  
IPC: \* G01N-021/78

CA Abstract No: \* 117(14)142622N  
Derwent WPI Acc No: \* C 92-183806  
Language of Document: German  
Patent (No,Kind,Date): DE 69110658 T2 19960321  
MESSUNG VON FARBREAKTIONEN DURCH UEBERWACHUNG EINER  
FLUORESSENZAENDERUNG. (German)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER (US); BASCOMB SHOSHANA (US); OLSON  
CAROLYN (US)  
Priority (No,Kind,Date): US 609278 A 19901105; WO 91US8118 W  
19911030  
Applic (No,Kind,Date): DE 69110658 A 19911030  
IPC: \* G01N-021/78  
CA Abstract No: \* 117(14)142622N  
Derwent WPI Acc No: \* C 92-183806  
Language of Document: German

EUROPEAN PATENT OFFICE (EP)  
Patent (No,Kind,Date): EP 507930 A1 19921014  
MEASUREMENT OF COLOR REACTIONS BY MONITORING A CHANGE OF FLUORESCENCE  
(English; French; German)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER JAMES (US); BASCOMB SHOSHANA (US);  
OLSON CAROLYN SHELCHUK (US)  
Priority (No,Kind,Date): WO 91US8118 W 19911030; US 609278 A  
19901105  
Applic (No,Kind,Date): EP 91920381 A 19911030  
Designated States: (National) BE; DE; ES; FR; GB; IT; NL  
IPC: \* G01N-021/78  
CA Abstract No: \* 117(14)142622N  
Derwent WPI Acc No: \* C 92-183806  
Language of Document: English  
Patent (No,Kind,Date): EP 519066 A1 19921223  
MEASUREMENT OF BACTERIAL CO 2? PRODUCTION IN AN ISOLATED FLUOROPHORE BY  
MONITORING AN ABSORBANCE REGULATED CHANGE OF FLUORESCENCE (English;  
French; German)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER JAMES (US); BASCOMB SHOSHANA (US);  
BOBOLIS JAMIE (US); SHERMAN DAVID (US); OLSON CAROLYN SHELCHUK  
(US)  
Priority (No,Kind,Date): WO 91US9716 W 19911223; US 638481 A  
19910104  
Applic (No,Kind,Date): EP 92904836 A 19911223  
Designated States: (National) BE; DE; ES; FR; GB; IT; SE  
IPC: \* G01N-021/64; G01N-021/76; C12Q-001/06  
CA Abstract No: \* 117(17)167173E  
Derwent WPI Acc No: \* C 92-268788  
Language of Document: English  
Patent (No,Kind,Date): EP 519066 A4 19930818  
MEASUREMENT OF BACTERIAL CO 2? PRODUCTION IN AN ISOLATED FLUOROPHORE BY  
MONITORING AN ABSORBANCE REGULATED CHANGE OF FLUORESCENCE (English;  
French; German)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER JAMES (US); BASCOMB SHOSHANA (US);  
BOBOLIS JAMIE (US); SHERMAN DAVID (US); OLSON CAROLYN SHELCHUK  
(US)  
Priority (No,Kind,Date): WO 91US9716 W 19911223; US 638481 A  
19910104  
Applic (No,Kind,Date): EP 92904836 A 19911223  
Designated States: (National) BE; DE; ES; FR; GB; IT; SE  
IPC: \* G01N-021/64; G01N-021/76; C12Q-001/06  
CA Abstract No: \* 117(17)167173E  
Derwent WPI Acc No: \* C 92-268788  
Language of Document: English  
Patent (No,Kind,Date): EP 507930 B1 19950621

MEASUREMENT OF COLOR REACTIONS BY MONITORING A CHANGE OF FLUORESCENCE.  
(English; French; German)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER JAMES (US); BASCOMB SHOSHANA (US);  
OLSON CAROLYN SHELCHUK (US)  
Priority (No,Kind,Date): WO 91US8118 W 19911030; US 609278 A  
19901105  
Applic (No,Kind,Date): EP 91920381 A 19911030  
Designated States: (National) BE; DE; ES; FR; GB; IT; NL  
IPC: \* G01N-021/78  
CA Abstract No: \* 117(14)142622N  
Derwent WPI Acc No: \* C 92-183806  
Language of Document: English

## SPAIN (ES)

Patent (No,Kind,Date): ES 2076556 T3 19951101  
MEDICION DE REACCIONES CROMATICAS POR MEDIO DE LA MONITORIZACION DE UN  
CAMBIO DE FLUORESCENCIA. (Spanish)  
Patent Assignee: BAXTER DIAGNOSTICS INC  
Author (Inventor): MORRIS ROGER JAMES (US); BASCOMB SHOSHANA (US);  
OLSON CAROLYN SHELCHUK (US)  
Priority (No,Kind,Date): US 609278 A 19901105  
Applic (No,Kind,Date): ES 91920381 EP 19911030  
Addnl Info: 0507930 EP patent valid in AT  
IPC: \* G01N-021/78  
CA Abstract No: \* 117(14)142622N  
Derwent WPI Acc No: \* C 92-183806  
Language of Document: Spanish

## JAPAN (JP)

Patent (No,Kind,Date): JP 5503365 T2 19930603  
Priority (No,Kind,Date): WO 91US8118 W 19911030; US 609278 A  
19901105  
Applic (No,Kind,Date): JP 92500159 A 19911030  
IPC: \* G01N-021/78; C12Q-001/26  
CA Abstract No: \* 117(14)142622N  
Derwent WPI Acc No: \* C 92-183806  
Language of Document: Japanese  
Patent (No,Kind,Date): JP 5504263 T2 19930708  
Priority (No,Kind,Date): WO 91US9716 W 19911223; US 638481 A  
19910104  
Applic (No,Kind,Date): JP 92505272 A 19911223  
IPC: \* C12Q-001/06; G01N-021/64; G01N-021/78; G01N-033/49  
CA Abstract No: \* 117(17)167173E  
Derwent WPI Acc No: \* C 92-268788  
Language of Document: Japanese

## MEXICO (MX)

Patent (No,Kind,Date): MX 9101919 A1 19920708  
PROCESO PARA DETERMINAR LA CONCENTRACION DE UNA SUBSTANCIA MEDIANTE EL  
CAMBIO DE FLUORESCENCIA (Spanish)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER J (US); BASCOMB SHOSHANA (US); OLSON  
CAROLYN SHELCHUK (US)  
Priority (No,Kind,Date): US 609278 A 19901105  
Applic (No,Kind,Date): MX 9101919 A 19911105  
IPC: \* G01J-003/46  
CA Abstract No: \* 117(14)142622N  
Derwent WPI Acc No: \* C 92-183806  
Language of Document: Spanish

## NORWAY (NO)

Patent (No,Kind,Date): NO 9203436 A 19920903  
MAALING AV BAKTERIELL CO2-PRODUKSJON I EN ISOLERT FLUOROFOR VED AA  
OVERVAAKE EN ABSORBANSREGULERT ENDRING AV FLUORESCENS (Norwegian)

Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER JAMES; BASCOMB SHOSHANA; BOBOLIS JAMIE ; SHERMAN DAVID; OLSON CAROLYN SHELCHUK  
Priority (No,Kind,Date): US 638481 A 19910104; WO 91US9716 W 19911223  
Applc (No,Kind,Date): NO 923436 A 19920903  
IPC: \* G01N  
CA Abstract No: \* 117(17)167173E  
Derwent WPI Acc No: \* C 92-268788  
Language of Document: Norwegian  
Patent (No,Kind,Date): NO 9203436 A0 19920903  
MAALING AV BAKTERIELL CO2-PRODUKSJON I EN ISOLERT FLUOROFOR VED AA OVERVAAKE EN ABSORBANSREGULERT ENDRING AV FLUORESCENS (Norwegian)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER JAMES; BASCOMB SHOSHANA; BOBOLIS JAMIE ; SHERMAN DAVID  
Priority (No,Kind,Date): US 638481 A 19910104; WO 91US9716 W 19911223  
Applc (No,Kind,Date): NO 923436 A 19920903  
IPC: \* G01N  
Language of Document: Norwegian

UNITED STATES OF AMERICA (US)  
Patent (No,Kind,Date): US 5173434 A 19921222  
MEASUREMENT OF COLOR REACTIONS BY MONITORING A CHANGE OF FLUORESCENCE (English)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER J (US); BASCOMB SHOSHANA (US); OLSON CAROLYN S (US)  
Priority (No,Kind,Date): US 609278 A 19901105  
Applc (No,Kind,Date): US 609278 A 19901105  
National Class: \* 436172000; 436501000; 436537000; 436800000; 250458100; 250461100  
IPC: \* G01N-021/76  
CA Abstract No: \* 117(14)142622N  
Derwent WPI Acc No: \* C 92-183806  
Language of Document: English  
Patent (No,Kind,Date): US 5372784 A 19941213  
MEASUREMENT OF BACTERIAL CO2 PRODUCTION IN AN ISOLATED FLUOROPHORE BY MONITORING AN ABSORBANCE REGULATED CHANGE OF FLUORESCENCE (English)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER J (US); BASCOMB SHOSHANA (US); OLSON CAROLYN S (US); BOBOLIS JAMIE (US); SHERMAN DAVID (US)  
Priority (No,Kind,Date): US 212674 A 19940311; US 638481 B1 19910104; US 609278 A2 19901105; US 238710 B2 19880831  
Applc (No,Kind,Date): US 212674 A 19940311  
Addnl Info: 5173434 19921222 Patented  
National Class: \* 422082080; 422052000; 422055000; 422056000; 422082050; 422082070; 435034000; 435039000; 435291000; 435808000; 436167000; 436169000; 436170000; 436172000  
IPC: \* G01N-021/76  
CA Abstract No: \* 117(14)142622N; 117(17)167173E  
Derwent WPI Acc No: \* C 92-183806; C 92-268788  
Language of Document: English  
Patent (No,Kind,Date): US 5565328 A 19961015  
MEASUREMENT OF COLOR REACTIONS BY MONITORING A CHANGE OF FLUORESCENCE  
Measurement of color reactions by monitoring a change of fluorescence (English)  
Patent Assignee: DADE INT INC (US)  
Author (Inventor): BASCOMB SHOSHANA (US); SWENSON FRANK J (US); SAND TED (US)  
Priority (No,Kind,Date): US 579089 A 19951227; US 431194 B1 19950427; US 174613 B1 19931228; US 16654 B1 19930209; US 895149 B1 19920605; US 238710 B1 19880831  
Applc (No,Kind,Date): US 579089 A 19951227

National Class: \* 435025000; 435018000; 435029000; 435034000;  
435037000; 435968000; 436172000  
IPC: \* C12Q-001/26; H01L-021/306  
Language of Document: English

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)  
Patent (No,Kind,Date): WO 9208123 A1 19920514  
MEASUREMENT OF COLOR REACTIONS BY MONITORING A CHANGE OF FLUORESCENCE  
(English)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER JAMES (US); BASCOMB SHOSHANA (US);  
OLSON CAROLYN SHELCHUK (US)  
Priority (No,Kind,Date): US 609278 A 19901105  
Applc (No,Kind,Date): WO 91US8118 A 19911030  
Designated States: (National) AU; BR; CA; JP; KR (Regional) AT; BE;  
CH; DE; DK; ES; FR; GB; GR; IT; LU; NL; SE  
Filing Details: WO 110000 With international search report; With  
amended claims  
IPC: \* G01N-021/78  
CA Abstract No: ; 117(14)142622N  
Derwent WPI Acc No: ; C 92-183806  
Language of Document: English  
Patent (No,Kind,Date): WO 9212413 A1 19920723  
MEASUREMENT OF BACTERIAL CO<sub>2</sub> PRODUCTION IN AN ISOLATED FLUOROPHORE BY  
MONITORING AN ABSORBANCE REGULATED CHANGE OF FLUORESCENCE (English)  
Patent Assignee: BAXTER DIAGNOSTICS INC (US)  
Author (Inventor): MORRIS ROGER JAMES (US); BASCOMB SHOSHANA (US);  
BOBOLIS JAMIE (US); SHERMAN DAVID (US)  
Priority (No,Kind,Date): US 638481 A 19910104  
Applc (No,Kind,Date): WO 91US9716 A 19911223  
Designated States: (National) AU; CA; JP; KR; NO (Regional) AT; BE;  
CH; DE; DK; ES; FR; GB; GR; IT; LU; MC; NL; SE  
Filing Details: WO 100000 With international search report  
IPC: \* G01N-021/64; G01N-021/76; C12Q-001/06  
CA Abstract No: ; 117(17)167173E  
Derwent WPI Acc No: ; C 92-268788  
Language of Document: English

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